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        DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE
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NEWS 7 DEC 21 IPC search and display fields enhanced in CA/CAplus with the
                IPC reform
NEWS 8 DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
                USPAT2
NEWS 9
        JAN 13
                IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 10
        JAN 13
                New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
                INPADOC
NEWS 11 JAN 17
                Pre-1988 INPI data added to MARPAT
                IPC 8 in the WPI family of databases including WPIFV
NEWS 12 JAN 17
NEWS 13 JAN 30 Saved answer limit increased
NEWS 14 JAN 31 Monthly current-awareness alert (SDI) frequency
                added to TULSA
                STN AnaVist, Version 1.1, lets you share your STN AnaVist
NEWS 15 FEB 21
                visualization results
NEWS 16 FEB 22
                Status of current WO (PCT) information on STN
                The IPC thesaurus added to additional patent databases on STN
NEWS 17
        FEB 22
NEWS 18 FEB 22 Updates in EPFULL; IPC 8 enhancements added
             FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
NEWS EXPRESS
             CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
             V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
             http://download.cas.org/express/v8.0-Discover/
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FULL ESTIMATED COST

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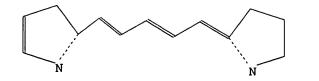
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http://www.cas.org/ONLINE/UG/regprops.html

=>

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50 ANSWERS

chain nodes :

11 12 13 14 15

ring nodes :

1 2 3 4 5 6 7 8 9 10

chain bonds :

1-11 6-15 11-12 12-13 13-14 14-15

ring bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10

exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 6-7 6-10 7-8 8-9 9-10

exact bonds :

1-11 6-15 11-12 12-13 13-14 14-15

### Match level :

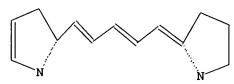
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS

# L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 11:30:46 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 286 TO ITERATE

100.0% PROCESSED 286 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 4706 TO 6734 PROJECTED ANSWERS: 1503 TO 2737

L2 50 SEA SSS SAM L1

=> s ll sss full

FULL SEARCH INITIATED 11:30:53 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 5782 TO ITERATE

SEARCH TIME: 00.00.01

L3 2479 SEA SSS FUL L1

=> FIL CAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION 166.94 167.15

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 11:30:58 ON 27 FEB 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 27 Feb 2006 VOL 144 ISS 10 FILE LAST UPDATED: 26 Feb 2006 (20060226/ED)

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=> s 13

L4 2370 L3

=> s 14 and tag

22423 TAG 8674 TAGS

26434 TAG

(TAG OR TAGS)

L5 58 L4 AND TAG

=> s 14 and biotin

28887 BIOTIN

110 BIOTINS

28897 BIOTIN

(BIOTIN OR BIOTINS)

L6 188 L4 AND BIOTIN

=> s 16 and (thiester or aminothiol)

0 THIESTER

536 AMINOTHIOL

421 AMINOTHIOLS

762 AMINOTHIOL

(AMINOTHIOL OR AMINOTHIOLS)

L7 1 L6 AND (THIESTER OR AMINOTHIOL)

=> s 16 and (thioester or aminothiol)

3589 THIOESTER

2079 THIOESTERS

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4752 THIOESTER
                 (THIOESTER OR THIOESTERS)
           536 AMINOTHIOL
           421 AMINOTHIOLS
           762 AMINOTHIOL
                 (AMINOTHIOL OR AMINOTHIOLS)
             1 L6 AND (THIOESTER OR AMINOTHIOL)
L8
=> s 16 and thioester
          3589 THIOESTER
          2079 THIOESTERS
          4752 THIOESTER
                 (THIOESTER OR THIOESTERS)
             0 L6 AND THIOESTER
L9
=> s 16 and aminothiol
           536 AMINOTHIOL
           421 AMINOTHIOLS
           762 AMINOTHIOL
                 (AMINOTHIOL OR AMINOTHIOLS)
L10
             1 L6 AND AMINOTHIOL
=> s 15 and (thioester or aminothiol)
          3589 THIOESTER
          2079 THIOESTERS
          4752 THIOESTER
                 (THIOESTER OR THIOESTERS)
           536 AMINOTHIOL
           421 AMINOTHIOLS
           762 AMINOTHIOL
                 (AMINOTHIOL OR AMINOTHIOLS)
L11
             1 L5 AND (THIOESTER OR AMINOTHIOL)
=> s 15 and (?thiol or thio?)
        101585 ?THIOL
        516215 THIO?
             4 L5 AND (?THIOL OR THIO?)
L12
=> s 16 and (?thiol or thio?)
        101585 ?THIOL
        516215 THIO?
            15 L6 AND (?THIOL OR THIO?)
L13
=> dup rem 112 113
PROCESSING COMPLETED FOR L12
PROCESSING COMPLETED FOR L13
L14
             18 DUP REM L12 L13 (1 DUPLICATE REMOVED)
               ANSWERS '1-18' FROM FILE CAPLUS
=> s 114 and bioaffinity
L15
            4 S L14
L16
            14 S L14
           571 BIOAFFINITY
             2 BIOAFFINITIES
           573 BIOAFFINITY
                 (BIOAFFINITY OR BIOAFFINITIES)
L17
             1 (L15 OR L16) AND BIOAFFINITY
=> d 117 ibib abs hitstr tot
L17 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                       2004:100690 CAPLUS
```

140:146515

DOCUMENT NUMBER:

Site-specific labeling of proteins using cyanine dye TITLE:

reporters

INVENTOR(S): Cotton, Graham John

PATENT ASSIGNEE(S):

UK

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	KIND DATE						ICAT		DATE									
US	US 2004023408											20020911						
CA	2493	309			AA 20040205				CA 2	003-	2493	20030728						
WO	2004	0115	56		A1		2004	0205		WO 2	003-	GB31	96		2	0030	728	
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,	
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
AU	2003	2469	57		<b>A1</b>		2004	0216		AU 2	003-2	2469	57		2	0030	728	
EP	1525	266			<b>A</b> 1		2005	0427		EP 2	003-	7711	63		2	0030	728	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
JP	2005	5347	39		Т2		2005	1117		JP 2	004-	52393	38		2	0030	728	
US	US 2005239144						2005	1027		US 2	005-	5226	75		2	0050	127	
PRIORITY	PRIORITY APPLN. INFO.:									GB 2	002-	1755	6	A 20020730				
							US 2002-241333						A 2	0020	911			
										WO 2	003-0	GB31	96	V	v 2	0030	728	

#### OTHER SOURCE(S): MARPAT 140:146515

The invention provides new cyanine dye reagents and methods that afford direct attachment of the cyanine dye reporter to either the N-terminus or C-terminus of a synthetic or recombinant peptide or protein and their derivs., in a site-specific manner, coupled with purification of the resultant labeled mol. Compds. D-L1-M(F)-L2-B [D is a fluorescent cyanine dye; B is a bioaffinity tag; F is a chemical entity which includes a target bonding group selected from the group consisting of thioester groups and 1,2-aminothiol groups; M is a group adapted for attaching to F; L1, L2 are groups containing 1-40 linked atoms selected from carbon atoms which may optionally include one or more groups selected from NH, alkylimino, O, CH:CH, CONH, or phenylenyl] are claimed. Thus,  $\alpha$ -D-desthiobiotin- $\epsilon$ -Cy5-L-lysine-MESNA (Cy5 is a dye and MESNA is HSCH2CH2SO3H) was prepared and used to label N-terminal cysteine Grb2SH2.

#### IΤ 653605-42-6

RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative) (site-specific labeling of proteins using cyanine dye reporters)

RN 653605-42-6 CAPLUS

L-Leucine, N-[6-[2-[5-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-CN ylidene)-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-3H-indolio]-1-oxohexyl]-Lcysteinylglycyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

PAGE 1-B

IT 146368-11-8 449175-58-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(site-specific labeling of proteins using cyanine dye reporters)

RN 146368-11-8 CAPLUS

CN 3H-Indolium, 2-[5-[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

RN 449175-58-0 CAPLUS

CN 3H-Indolium, 2-[5-[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt, monopotassium salt (9CI) (CA INDEX NAME)

K

IT 312961-84-5P 312961-85-6P 653605-40-4P 653605-41-5P 653605-43-7P 653605-44-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(site-specific labeling of proteins using cyanine dye reporters)

RN 312961-84-5 CAPLUS

3H-Indolium, 2-[5-[1-[6-[[(5S)-5-carboxy-5-[[(9H-fluoren-9-CN ylmethoxy)carbonyl]amino]pentyl]amino]-6-oxohexyl]-1,3-dihydro-3,3dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

RN

312961-85-6 CAPLUS
3H-Indolium, 2-[5-[1-[6-[[(5S)-5-amino-5-carboxypentyl]amino]-6-oxohexyl]-CN 1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

PAGE 1-B

\_\_CO2H

RN 653605-40-4 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[6-oxo-6-[(2-sulfoethyl)thio]hexyl]-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

RN 653605-41-5 CAPLUS

CN Glycinamide, N-[6-[2-[5-(1-ethyl-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-3H-indolio]-1-oxohexyl]-L-cysteinylglycyl-L-leucyl-L-α-aspartyl-L-lysyl-L-arginylglycyl-L-cysteinyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-B

PAGE 2-B

RN 653605-43-7 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[6-[[(5S)-5-[[6-[[6-[(4R,5S)-5-methyl-2-oxo-4-imidazolidinyl]-1-oxohexyl]amino]-1-oxohexyl]amino]-6-oxo-6-[(2-sulfoethyl)thio]hexyl]amino]-6-oxohexyl]-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A

PAGE 1-B

$$\begin{array}{c}
\text{Me} \\
\text{N} \\
\text{O}
\end{array}$$

$$\begin{array}{c}
\text{CH2} \\
\text{S} \\
\text{N} \\
\text{H}
\end{array}$$

$$\begin{array}{c}
\text{CH2} \\
\text{S} \\
\text{N} \\
\text{H}
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{N} \\
\text{H}
\end{array}$$

RN 653605-44-8 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[(5S)-5-carboxy-5-[[6-[[6-[(4R,5S)-5-methyl-2-oxo-4-imidazolidinyl]-1-oxohexyl]amino]-1-oxohexyl]amino]pentyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A

PAGE 1-B

$$(CH2)5$$

$$(CH2)5$$

$$(CH2)5$$

$$(CH2)5$$

$$(CH2)5$$

$$(CH2)5$$

IT 653605-43-7DP, conjugate with an N-terminal cysteine derivative of Grb2 protein SH2 domain

RL: SPN (Synthetic preparation); PREP (Preparation)

(site-specific labeling of proteins using cyanine dye reporters)

RN 653605-43-7 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[6-[[(5S)-5-[[6-[[6-[(4R,5S)-5-methyl-2-oxo-4-imidazolidinyl]-1-oxohexyl]amino]-1-oxohexyl]amino]-6-oxo-6-[(2-sulfoethyl)thio]hexyl]amino]-6-oxohexyl]-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-B

=> s 114 not 117

L18 4 S L14 L19 14 S L14

L20 17 (L18 OR L19) NOT L17

=> d 120 ibib abs hitstr tot

L20 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1078102 CAPLUS

DOCUMENT NUMBER: 143:362862

TITLE: Cysteine-containing peptide tag for site-specific conjugation of proteins INVENTOR(S): Backer, Marina V.; Backer, Joseph M.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 59 pp., Cont.-in-part of U.S.

Ser. No. 872,712.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005221431	A1	20051006	US 2005-83508	20050318
US 2003059461	A1	20030327	US 2001-872712	20010601
PRIORITY APPLN. INFO.:			US 2000-209660P	P 20000606
			US 2001-872712	A2 20010601

AB The present invention is directed to a biol. conjugate, comprising: (a) a

targeting moiety comprising a polypeptide having an amino acid sequence comprising the a 15-amino acid portion of human RNase I with an Arg-4→Cys mutation and the polypeptide sequence of a selected targeting protein; and (b) a binding moiety bound to the targeting moiety; the biol. conjugate having a covalent bond between the thiol group of the RNase I fragment and a functional group in the binding moiety. The present invention is also directed to a biol. conjugate, comprising: (a) a human RNase I targeting moiety and the polypeptide sequence of a selected targeting protein; and (b) a binding moiety that comprises an adapter protein, the adapter protein having a thiol group; the biol. conjugate having a disulfide bond between the thiol group of the RNase I fragment and the thiol group of the adapter protein. Adaptor proteins are based on chimeric BH-RNase comprising residues 1-29 of bovine RNase A fused to residues 3-127 of human RNase I. Selected targeting proteins comprise vascular endothelial growth factor, annexin V, and anthrax lethal factor. The present invention is also directed to biol. sequences employed in the above biol. conjugates, as well as pharmaceutical prepns. and methods using the above biol. conjugates.

IT 172777-84-3, Cy 5.5

RL: RCT (Reactant); RACT (Reactant or reagent) (conjugation of; cysteine-containing peptide tag for site-specific conjugation of proteins)

172777-84-3 CAPLUS RN

CN 1H-Benz[e]indolium, 2-[5-[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene]-1,3pentadienyl]-3-ethyl-1,1-dimethyl-6,8-disulfo-, inner salt, trisodium salt (9CI) (CA INDEX NAME)

3 Na

L20 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:467846 CAPLUS

DOCUMENT NUMBER: 143:22605

TITLE:

Flow cytometric, particle-based binding assay for the

determination of transient protein-protein

interactions

INVENTOR(S): Baumgrass, Ria; Blex, Christian

German

Deutsches Rheuma-Forschungszentrum Berlin, Germany PATENT ASSIGNEE(S):

SOURCE: Eur. Pat. Appl., 21 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRIORITY APPLN. INFO.: EP 2003-90412 20031128

AB The invention concerns a method for the detection of transient protein-protein interactions in a way that the first protein is labeled and the second protein is combined with a tag; the two proteins are contacted and incubated with anti-tag coated particles; the particles are analyzed by flow cytometry and the detection of the label is correlated to the protein-protein interaction. The interaction between first protein calcineurin and second protein nuclear factor of activated T-cell (NFAT) was studied. Mols. were screened that inhibit calmodulin-NFAT binding; FITC-labeled calmodulin and biot-VIVID, a biotinylated 17mer optimized binding peptide of NFAT were used. The invention also concerns a test kit for carrying out the assay.

IT 146368-14-1D, Cy5, derivs.

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Cy5; flow cytometric, particle-based binding assay for determination of transient protein-protein interactions)

RN 146368-14-1 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:300690 CAPLUS

DOCUMENT NUMBER: 142:351752

TITLE: Surface immobilized polyelectrolyte with multiple

functional groups capable of covalently bonding to

biomolecules

INVENTOR(S): Wang, Xinwen; Banerjee, Sukanta PATENT ASSIGNEE(S): Bioarray Solutions, Ltd., USA

SOURCE: PCT Int. Appl., 23 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT	NO.			KIND DATE					APPL		DATE						
	WO 200	0313	05		A2		2005	0407						20040922				
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
							ID,											
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
		SI,	SK,	TR,	BF,	ΒJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	
		SN,	TD,	TG														
	US 2005	2606	11		A1		2005	1124	1	US 2	004-	9470	95		2	0040	922	
PRIC	RITY API	PLN.	INFO	.:					1	US 2	003-	5047	16P		P 2	0030	922	
AB	A polye	elect	roly	te h	avin	g mu	ltip.	le e	xpos	ed f	unct.	iona	l gr	oups	, ea	ch si	uch	
	group h	eing	cap	able	of (	cova	lent	ly bo	ondi	ng to	oai	mol.	, is	imm	obil:	ized	on a	
	surface	e for	the	pur	pose	of :	bond:	ing t	to a	bio	mol.	The	e bi	omol	. car	n be	, for	
	example	e, a	nucl	eic a	acid,	, e.	g.,	an ar	mine	fun	ctio	nali	zed (	olig	onuc.	leot:	ide.	
	The pol	.yele	ctro.	lyte	can	inc	lude	, e.	g.,	BSA	(Bov.	ine :	Seru	n All	bumi	n) wl	nich is	
	bound t	o a	func	tion	aliz	ed s	urfa	ce u	sing	a c	oval	ent :	immol	oili	zatio	on		

strategy, e.g., reaction with the surface of a tosyl-activated

reacted with BSA. The EDAC reaction was used to couple aminated oligonucleotide probes to the BSA beads. The oligonucleotide functionalized beads were used in a hybridization assay.

microparticle. Following such reaction, exposed reactive functional groups on the protein, such as amine, carboxyl, thiol, hydroxyl

IT 144377-05-9D, Cy5, conjugates with DNA target

RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)

groups can further be utilized to covalently couple the oligonucleotide of interest using suitable chemical Tosylated fluorescence colored beads were

(oligonucleotide-functionalized beads hybridization with; surface immobilized polyelectrolyte with multiple functional groups capable of covalently bonding to biomols.)

RN 144377-05-9 CAPLUS

CN 3H-Indolium, 5-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-2-[5-[5-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-1-(4-sulfobutyl)-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-(4-sulfobutyl)-, inner salt, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

L20 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:60755 CAPLUS

Correction of: 2004:1036570

DOCUMENT NUMBER: 142:154259

Correction of: 142:36938

TITLE: Analysis of genetic information contained in

peripheral blood for diagnosis, prognosis and

monitoring treatment of allergy, infection and genetic

disease in human

INVENTOR(S): Liew, Choong-Chin

PATENT ASSIGNEE(S): Chondrogene Limited, Can.

SOURCE: U.S. Pat. Appl. Publ., 155 pp., Cont.-in-part of U.S.

Ser. No. 802,875.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 47

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004241726	A1	20041202	US 2004-812707	20040330
US 2004014059	A1	20040122	US 2002-268730	20021009
US 2005191637	A1	20050901	US 2004-803737	20040318
US 2005196762	A1	20050908	US 2004-803759	20040318
US 2005196763	A1	20050908	US 2004-803857	20040318
US 2005196764	A1	20050908	US 2004-803858	20040318
US 2005208505	Al	20050922	US 2004-803648	20040318
US 2004241726	<b>A1</b>	20041202	US 2004-812707	20040330
US 2004241726	<b>A1</b>	20041202	US 2004-812707	20040330
US 2004265869	A1	20041230	US 2004-812716	20040330
PRIORITY APPLN. INFO.:			US 1999-115125P	P 19990106
			US 2000-477148	B1 20000104
			US 2002-268730	A2 20021009
			US 2003-601518	A2 20030620
			US 2004-802875	A2 20040312
			US 2004-812707	A 20040330

The present invention is directed to detection and measurement of gene transcripts and their equivalent nucleic acid products in blood. Specifically provided is anal. performed on a drop of blood for detecting, diagnosing, and monitoring diseases, and in particular allergy, using gene-specific and/or tissue-specific primers. Affymetrix Human Genome U133 and ChondroChip microarrays were used to detect differentially expressed gene transcripts in hypertension, obesity, allergy, systemic steroids, coronary artery disease, diabetes type 2, hyperlipidemia, lung disease, bladder cancer, rheumatoid arthritis, osteoarthritis, liver cancer, schizophrenia, Chagas disease, asthma, and manic depression syndrome. The present invention describes methods by which delineation of the sequence and/or quantitation of the expression levels of disease-specific genes allows for an immediate and accurate diagnostic/prognostic test for disease or to

assess the effect of a particular treatment regimen. [This abstract record is one of 3 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

IT **144377-05-9**, Cy 5

> RL: ARU (Analytical role, unclassified); BSU (Biological study, unclassified); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(Cy 5; anal. of genetic information contained in peripheral blood for diagnosis, prognosis and monitoring treatment of allergy, infection and genetic disease in human)

144377-05-9 CAPLUS RN

CN

3H-Indolium, 5-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-2-[5-[5-[2-1]][(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-1-(4sulfobutyl)-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-(4sulfobutyl)-, inner salt, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

🕨 Na

PAGE 1-B

L20 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1036551 CAPLUS

DOCUMENT NUMBER:

TITLE:

142:18995 Transcriptional incorporation of adenine analogs into

RNA and use of the analog-containing RNAs

INVENTOR(S):

Huang, Faqing

PATENT ASSIGNEE(S):

University of Southern Mississippi, USA

SOURCE:

U.S. Pat. Appl. Publ., 25 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE Methods of incorporating adenosine analogs and derivs. into the 5'-ends of an RNA by transcription are described. These adenosine derivs. may include naturally occurring compds. such as CoA, NAD, and FAD, as well as synthetic analogs containing reactive groups or nuclease-resistant phosphate backbone analogs. The derivs. can be used to impart desirable properties to the RNA such as fluorescence, the ability to bind to receptors or ligands, and improved catalytic activity. The transcribed RNAs can be used in a variety of applications including nucleic acid detection, designed or random generation of catalytic RNAs, antisense applications, and in the study of RNA structure and function. The incorporation is achieved by in vitro transcription using all four nucleoside triphosphates and the triphosphate of the adenine analog. The analog is present at significantly higher concentration than the ATP.

146368-14-1D, Cy5, RNA containing IT

RL: BSU (Biological study, unclassified); BIOL (Biological study) (transcriptional incorporation of adenine analogs into RNA and use of analog-containing RNAs)

RN

146368-14-1 CAPLUS 3H-Indolium, 2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-CN dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

L20 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:327559 CAPLUS

DOCUMENT NUMBER: 142:51536

 $DDI-\mu FIA-a$  readily configurable TITLE:

microarray-fluorescence immunoassay based on

DNA-directed immobilization of proteins

AUTHOR(S): Wacker, Ron; Niemeyer, Christof M.

CORPORATE SOURCE: CHIMERA BIOTEC GmbH, Dortmund, D-44227, Germany

SOURCE: ChemBioChem (2004), 5(4), 453-459

CODEN: CBCHFX; ISSN: 1439-4227 Wiley-VCH Verlag GmbH & Co. KGaA PUBLISHER:

DOCUMENT TYPE: Journal LANGUAGE: English

We describe a chip-based immunoassay for multiplex antigen detection, based on the self-assembly of semi-synthetic DNA - protein conjugates to generate an easily configurable protein microarray. The general principle of this microarray-fluorescence immunoassay (µFIA) is similar to that of a two-sided (sandwich) immunoassay. However, covalent single-stranded DNA - streptavidin conjugates are employed for the efficient

immobilization of biotinylated capture antibodies through hybridization to complementary surface-bound DNA oligomers. In a model system, we use the DNA-directed immobilization (DDI) of antibodies to generate an antibody microarray for the parallel detection of the tumor marker human carcinoembryonic antigen (CEA), recombinant mistletoe lectin rViscumin (rVis), ceruloplasmin (CEP), and complement-1-inactivator (C1A) in human blood serum samples. Detection limits down to 400 pg mL-1 are reached. In addition, we describe a method for the internal standardization of protein microarray analyses, based on the simultaneous measurement of constant amts. of the blood proteins CEP and C1A, intrinsically present in human serum, to compensate for interexperimental variations usually occurring in microarray analyses. The standardization leads to a significantly higher data reliability and reproducibility in intra- and interassay measurements. We further demonstrate that the DDI-µFIA can also be carried out in a single step by tagging of the analyte simultaneously with both capture and detection antibody and subsequent immobilization of the immunocomplex formed, on the DNA microarray capture matrix. This protocol significantly reduces handling time and costs of anal.

IT 146368-14-1D, Cy5, reaction with streptavidin

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (DDI-FIA-a readily configurable microarray-fluorescence immunoassay based on DNA-directed immobilization of proteins)

RN 146368-14-1 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:981813 CAPLUS

DOCUMENT NUMBER: 141:187167

TITLE: First results on label-free detection of DNA and

protein molecules using a novel integrated sensor technology based on gravimetric detection principles Gabl, R.; Feucht, H.-D.; Zeininger, H.; Eckstein, G.;

Schreiter, M.; Primig, R.; Pitzer, D.; Wersing, W.

Corporate Technology, Siemens AG, Munich, 81739,

CORPORATE SOURCE: Corpora Germany

SOURCE: Biosensors & Bioelectronics (2004), 19(6), 615-620

CODEN: BBIOE4; ISSN: 0956-5663

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

AUTHOR(S):

LANGUAGE: English

A novel integrated bio-sensor technol. based on thin-film bulk acoustic wave resonators on silicon is presented and the feasibility of detecting DNA and protein mols. proofed. The detection principle of these sensors is label-free and relies on a resonance frequency shift caused by mass loading of an acoustic resonator, a principle very well known from quartz crystal micro balances. Integrated ZnO bulk acoustic wave resonators with resonance frequencies around 2 GHz have been fabricated, employing an acoustic mirror for isolation from the silicon substrate. DNA oligos have been thiol-coupled to the gold electrode by on-wafer dispensing. In a further step, samples have either been hybridized or alternatively a protein has been coupled to the receptor. The measurement results show the new bio-sensor being capable of both, detecting proteins as well as the DNA hybridization without using a label. Due to the substantially higher oscillation frequency, these sensors already show much higher sensitivity and resolution comparable to quartz crystal micro balances. The potential for these sensors and sensors arrays as well as technol. challenges will be discussed in detail.

IT 146368-14-1D, Cy5, reaction with nucleotides RL: ANT (Analyte); ANST (Analytical study)

(label-free detection of DNA and protein mols. using novel integrated sensor technol. based on gravimetric detection principles)

RN 146368-14-1 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:818556 CAPLUS

DOCUMENT NUMBER: 139:318385

TITLE: New method and kit of DNA sequencing using nucleotide

labeled with fluorescent dyes via disulfide bond from

capped thiol groups

INVENTOR(S): Olsson, Charlotta; Tooke, Nigel

PATENT ASSIGNEE(S): Pyrosequencing AB, Swed. SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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KIND
                                DATE
    PATENT NO.
                                           APPLICATION NO.
                                                                   DATE
                                           ______
                         ____
                                20031016
                                           WO 2003-SE547
                                                                   20030404
    WO 2003085135
                         A1
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            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
            PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
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            FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    CA 2481495
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                                           CA 2003-2481495
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    AU 2003214765
                         A1
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                                                                   20030404
    EP 1495137
                                20050112
                                           EP 2003-710595
                                                                   20030404
                         A1
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                         B1
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                         T2
                                           JP 2003-582312
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                                                                   20030404
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                                20050915
                                           AT 2003-710595
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    US 2005244827
                         A1
                                20051103
                                           US 2005-510107
                                                                   20050523
                                            SE 2002-1024
PRIORITY APPLN. INFO.:
                                                               A 20020404
                                           US 2002-369599P
                                                               P 20020404
                                            WO 2003-SE547
                                                               W 20030404
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AB The present invention relates to a method for determining the sequence of a nucleic acid mol. comprising the steps of: (a) providing a single-stranded form of said nucleic acid mol.; (b) hybridizing a primer to said single stranded form of said nucleic acid mol. to form a template/primer complex; (c) enzymically extending the primer by the addition of a polymerase and a mixture of at least one nucleotide and at least one labeled derivative of the

at

least one nucleotide, wherein the at least one labeled derivative of the at least one nucleotide comprises a label linked to the nucleotide via a cleavable link and wherein the amount of labeled derivative of the at least one nucleotide in said mixture of the at least one nucleotide and the labeled derivative of the at least one nucleotide is within the range of 1-50 mol-%, 1-40 mol-%, 1-30 mol-%, or 1-20 mol-%. (d) determining the type of nucleotide added to the primer; and (e) repeating steps (c) to (d) at least once. In particular embodiments, capping thiol groups of Cy5-SS-dCTP is shown to protect the incorporated nucleotide from premature cleavage. Also demonstrated are the linear relationship between the fluorescent signal and number of bases incorporated in homopolymer stretches with Cy5-SS-dCTP/dCTP mixes. The selectivity of the polymerase for labeled against non-labeled nucleotides, in particular, UTP and GTP, are demonstrated under a variety of nucleotide mixture conditions using Klenow exo-DNA polymerase.

CN 3H-Indolium, 2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:376654 CAPLUS

DOCUMENT NUMBER: 138:390922

TITLE: Arsenide compound system for selective targeting of

apoptotic cells

INVENTOR(S): Hogg, Philip John

PATENT ASSIGNEE(S): Unisearch Limited, Australia

SOURCE: PCT Int. Appl., 85 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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								VN,					•	•	•	•	•	
	RW:												ZM,	ZW,	AT,	BE,	BG,	
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	US 2005101524																	
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OTHER	THED SOUDCE/S).					יים עם	120.	2000						•		~ ~ L L		

OTHER SOURCE(S): MARPAT 138:390922

AB The invention discloses a method of selectively targeting an active agent (or agent capable of becoming an active agent) to apoptotic cells in a vertebrate, comprising administering to the vertebrate a system comprising an arsenoxide (or arsenoxide equivalent) compound and the agent, wherein the system selectively targets apoptotic cells. Preparation of e.g.

4-[N-(S-glutathionylacetyl)amino]phenylarsenoxide is described.

IT 172777-84-3, Cy5.5

RN

RL: DGN (Diagnostic use); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(arsenide compound system for selective targeting of apoptotic cell) 172777-84-3 CAPLUS

CN 1H-Benz[e]indolium, 2-[5-[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-ethyl-1,1-dimethyl-6,8-disulfo-, inner salt, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

IT 331722-80-6P 525549-67-1P

RL: DGN (Diagnostic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(arsenide compound system for selective targeting of apoptotic cell)

RN 331722-80-6 CAPLUS

CN Glycine, N-[6-[2-[5-(3-ethyl-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene)-1,3-pentadienyl]-1,1-dimethyl-6,8-disulfo-1H-benz[e]indolio]-1-oxohexyl]-L-γ-glutamyl-S-[2-[(4-arsenosophenyl)amino]-2-oxoethyl]-L-cysteinyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

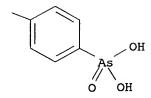
PAGE 1-B

RN 525549-67-1 CAPLUS

Glycine, N-[6-[2-[5-(3-ethyl-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene)-1,3-pentadienyl]-1,1-dimethyl-6,8-disulfo-1H-benz[e]indolio]-1-oxohexyl]-L-γ-glutamyl-S-[2-[(4-arsonophenyl)amino]-2-oxoethyl]-L-cysteinyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

PAGE 1-B



REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:58701 CAPLUS

DOCUMENT NUMBER:

138:119557

TITLE:

Peptidomimetic protein-binding microarrays on mirrored

substrates for performing proteomic analyses

INVENTOR(S):

Charych, Deborah; Beausoleil, Eric; Zuckermann, Ronald

N.

PATENT ASSIGNEE(S):

Chiron Corporation, USA

SOURCE:

U.S. Pat. Appl. Publ., 32 pp., Cont.-in-part of U.S.

Pat. Appl. 2002 55,125.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

Englisi

FAMILY ACC. NUM. COUNT:

### PATENT INFORMATION:

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      JP 2005535872
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                              Т2
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PRIORITY APPLN. INFO.:
                                                     US 2000-209711P
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                                                     US 2001-874091
                                                                            A2 20010604
                                                     US 2002-190308
                                                                            A 20020703
                                                     WO 2003-US21127
                                                                             W 20030703
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AB Provided are peptidomimetic protein-binding arrays, their manufacture, use, and application. The protein-binding array elements of the invention include a peptidomimetic segment linked to a solid support via a stable anchor. The invention contemplates peptidomimetic array element library synthesis, distribution, and spotting of array elements onto solid planar substrates, labeling of complex protein mixts., and the anal. of differential protein binding to the array. The invention also enables the enrichment or purification, and subsequent sequencing or structural anal. of proteins that are identified as differential by the array screen. Kits including proteomic microarrays in accordance with the present invention are also provided. Slides were prepared with a reflective aluminum coating that was further overcoated with a thin silicon dioxide dielec., followed by APTES. The Al/SiO2 substrate amplified the signal from Cy3/Cy5 tagged cDNA by approx. 10-40 fold relative to the corresponding glass substrate.

IT 146368-14-1, Cy5

RL: RCT (Reactant); RACT (Reactant or reagent)

(proteins reaction with; peptidomimetic protein-binding microarrays on mirrored substrates for performing proteomic analyses)

RN

146368-14-1 CAPLUS 3H-Indolium, 2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-CN dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

L20 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:869122 CAPLUS

DOCUMENT NUMBER: 137:364361

TITLE: Methods for fragmenting and labeling nucleic acids for

diagnosis of diseases

INVENTOR(S): Bourget, Cecile; Kotera, Mitsuharu; Lhomme, Jean;

Trevisiol, Emmanuelle; Laayoun, Ali; Tora, Christelle;

Sothier, Isabelle

PATENT ASSIGNEE(S): Bio Merieux, Fr.; Universite Joseph Fourier (Grenoble

1); Centre National De La Recherche Scientifique

SOURCE: PCT Int. Appl., 161 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT	мо.			KIND DATE						ICAT						
					A2 20021114 A3 20030925												
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	'CH,	CN,
											EE,						
											KG,						
											MW,						
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VN,	ΥU,	ZA,	ZM,	ZW							
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
											CY,						
		GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
		GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG							
FR	2824	335			A1		2002	1108		FR 2	001-	6039			2	0010	504
					AA 20021114												
US	2003	1435	55		A1 20030731			1	US 2	002-		20020503					
EP	1383																
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
					•		RO,		•	•							
JP	2004		Т2		2004	0909		JP 2	002-	5876	43		2	0020	503		
PRIORIT	Y APP	LN.	INFO	.:				FR 2001-6039					7				
						US 2001-310273P					]	P 20010807					
							1	WO 2	002-1	FR15	42	7	N 2	0020	503		
OTHER SO	HER SOURCE(S):						137:	36436	51								

. AB The invention concerns a method for labeling and fragmenting a single-stranded or double-stranded DNA (DNA) comprising fragmenting the DNA by generating an abasic site on said DNA, attaching a marker on at least one of the fragments by means of a labeling reagent,. The labeling reagent is covalently bonded on at least one phosphate of said DNA fragment. The invention is applicable in the field of diagnosis.

IT 475270-49-6P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(methods for fragmenting and labeling nucleic acids for diagnosis of diseases)

RN 475270-49-6 CAPLUS

CN 3H-Indolium, 1-[6-[[3-(1-diazoethyl)phenyl]amino]-6-oxohexyl]-2-[5-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

$$R - (CH_2)_5 - C - NH - C - Me$$

• cl-

IT 475114-21-7P 475114-47-7P 475114-48-8P 475114-49-9P 475114-50-2P 475270-50-9P

475270-52-1P 475270-59-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(methods for fragmenting and labeling nucleic acids for diagnosis of diseases)

RN 475114-21-7 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[(3-acetylphenyl)amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1,3,3-trimethyl-, chloride (9CI) (CA INDEX NAME)

● c1-

RN 475114-47-7 CAPLUS

CN 3H-Indolium, 2-[5-[1-[22-[4-(dimethoxymethyl)phenyl]-6,22-dioxo-11,14,17-trioxa-7,21-diazadocos-1-yl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1,3,3-trimethyl-, iodide (9CI) (CA INDEX NAME)

RN 475114-48-8 CAPLUS

CN 3H-Indolium, 2-[5-[1-[22-(4-formylphenyl)-6,22-dioxo-11,14,17-trioxa-7,21-diazadocos-1-yl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1,3,3-trimethyl-, chloride (9CI) (CA INDEX NAME)

RN 475114-49-9 CAPLUS

CN 3H-Indolium, 2-[5-[1-[22-[4-(hydrazonomethyl)phenyl]-6,22-dioxo-11,14,17-trioxa-7,21-diazadocos-1-yl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1,3,3-trimethyl-, chloride (9CI) (CA INDEX NAME)

RN 475114-50-2 CAPLUS

CN 3H-Indolium, 2-[5-[1-[22-[4-(diazomethyl)phenyl]-6,22-dioxo-11,14,17-trioxa-7,21-diazadocos-1-yl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1,3,3-trimethyl-, chloride (9CI) (CA INDEX NAME)

R— (CH<sub>2</sub>)<sub>5</sub>-C-NH- (CH<sub>2</sub>)<sub>3</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-CH<sub>2</sub>-CH<sub>2</sub>-O-(CH<sub>2</sub>)<sub>3</sub>-NH- 
$$\parallel$$
 O

$$-\overset{\text{O}}{\underset{-}{\text{CH}}} \overset{\text{CH}}{\underset{-}{\text{N}_2}}$$

RN

475270-50-9 CAPLUS
3H-Indolium, 1-(5-carboxypentyl)-2-[5-(1,3-dihydro-1,3,3-trimethyl-2H-CN indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-, iodide (9CI) (CA INDEX NAME)

• I-

RN 475270-52-1 CAPLUS

CN 3H-Indolium, 2-[5-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3pentadienyl]-1-[6-[[3-(1-hydrazonoethyl)phenyl]amino]-6-oxohexyl]-3,3dimethyl-, chloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{N-NH}_2\\ \parallel\\ \text{C-Me} \end{array}$$

PAGE 2-A

● cl-

RN 475270-59-8 CAPLUS

CN 3H-Indolium, 1-[6-(acetyloxy)-6-oxohexyl]-2-[5-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-, bromide (9CI) (CA INDEX NAME)

• Br-

L20 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:832909 CAPLUS

DOCUMENT NUMBER: 137:348832

TITLE: Mass spectrometric analysis of nucleic acids using

oligonucleotides modified with mass labels

INVENTOR(S):
Grosveld, Frank

PATENT ASSIGNEE(S): Erasmus Universiteit Rotterdam, Neth.

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

PA'	TENT	NO.			KIND DATE			•	APPL	ICAT		DATE					
				A2 20021031 A3 20031120				WO 2	002-	<del>-</del>	20020424						
	W:	CO,	CR,	CU,	CZ,	DE,	AU, DK, IN,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		LS,	LT,	LU,	LV,	MA,	MD, SE,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
	RW:	GH,	GM,	KE,	LS,	MW,	YU, MZ, TM,	SD,	SL,	SZ,							
<b>a</b> 2	2445	GR, GN,	IE, GQ,	IT, GW,	LU, ML,	MC, MR,	NL, NE,	PT, SN,	SE, TD,	TR, TG	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,
	2445 1385	932			A2		2002 2004 ES,	0204		EP 2	002-	7358	71		2	00204	124
	2005	IE, 5008:	SI, 24	LT,	LV, T2	FI,	RO, 2005	MK, 0113	CY,	AL, JP 2	TR 002-	5835	67	NL,	2	00204	124
US	BR 2002009205 US 2004137570 IORITY APPLN. INFO.:									BR 2002-9205 US 2003-693308 GB 2001-10030					20020424 20031024 A 20010424		
											001-: 002-:				-	00104 00204	

AB The present invention relates to nucleic acid anal. and in particular, but not exclusively, computational aspects of nucleic acid anal. The present invention provides a method for constructing a set, or repertoire, of sequence-specific binding mols. which are differentiable by mass. According to an aspect of the present invention, there is provided a method for constructing a repertoire of oligomers differentiable by mass, comprising: (a) providing a heterogeneous pool of monomers, wherein said monomers are modified by addition of one or more of a selection of mass labels; (b) optionally, providing a heterogeneous pool of unlabeled monomers; (c) determining the monomer sequences of the oligomers to be represented in the repertoire and calculating the number and nature of the mass labels to be incorporated into each monomer such that each oligomer differs in mass; and (d) assembling a plurality of labeled monomers and, optionally, one or more unlabeled monomers, to form the oligomers. repertoire is constructed so that each oligomer with a different sequence has a different mass characteristic. The members of the repertoire which hybridized to the nucleic acid can then be identified by a mass anal. another aspect, the invention provides a method for analyzing nucleic acid in a biol. sample, comprising the steps of: (a) immobilizing the nucleic acid (s) in the sample onto a solid support; (b) hybridizing to the nucleic acid (s) at a desired stringency a repertoire of oligonucleotides, and eluting those members of the repertoire which do not hybridize at the desired stringency; (c) eluting the repertoire members hybridized in step (b) and analyzing said members to resolve their mass. A powerful technique to detect and quantify nucleic acid sequences based on the identification of oligomers according to their mass is provided. The technique does not suffer from the disadvantages associated with 32P-labeling or forming biotinylated or fluorescein-conjugated probes and when coupled with a mass spectrometric anal. gives rapid, precise and unambiguous results.

### IT 146368-14-1, Cy5

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (Cy5, oligonucleotide modification with; mass spectrometric anal. of nucleic acids using oligonucleotides modified with mass labels)

RN 146368-14-1 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-

dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

L20 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:736109 CAPLUS

DOCUMENT NUMBER: 137:257647

TITLE: Use of a substantially cell membrane impermeable

arsenoxide compound for treating arthritis

INVENTOR(S): Hogg, Philip John; Donoghue, Neil

PATENT ASSIGNEE(S): Unisearch Limited, Australia

SOURCE: PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA:	CENT :	NO.			KIN	D	DATE		i	APPL	ICAT	ION 1	NO.			ATE	
	WO	2002	0743	05		A1	_	2002	0926	Ī	WO 2	002-	AU31	0				
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
	PL, PT, RO			RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
	UA, UG, US			US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	
	TJ, TM																	
	RW: GH, GM, KE			KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,	
			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
								CM,										
	EΡ	1379	233			<b>A1</b>		2004	0114	]	EP 2	002-	7044	85		2	0020	319
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
								RO,										
	US 2004138102					<b>A1</b>		2004	0715	1	US 2	004-	4722	52		2	0040	315
PRIO	IORITY APPLN. INFO.:				.:					1	AU 2	001-	3798		7	A 2	0010	319
										7	WO 2	002-2	AU31	0	7	W 2	0020	319
									~									

OTHER SOURCE(S): MARPAT 137:257647

The invention provides a method of treatment and/or prophylaxis of arthritis in a vertebrate, comprising administering a therapeutically effective amount of a compound A-(L-Y)p [A = at least one substantially cell-membrane impermeable pendant group; L = linker and/or spacer group; Y = at least one arsenoxide or arsenoxide equivalent; p = 1-10; the sum total of carbon atoms in A and L together is greater than 6], or a pharmaceutically

acceptable salt thereof, optionally together with a pharmaceutically acceptable carrier, diluent or excipient. Preparation of compds. of the invention is described.

IT 172777-84-3D, Cy 5.5, linked arsenoxide derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(cell membrane impermeable arsenoxide compound for treating arthritis)

RN 172777-84-3 CAPLUS

CN

1H-Benz[e]indolium, 2-[5-[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-ethyl-1,1-dimethyl-6,8-disulfo-, inner salt, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

IT 331722-80-6P

RL: SPN (Synthetic preparation); PREP (Preparation)

(cell membrane impermeable arsenoxide compound for treating arthritis)

RN 331722-80-6 CAPLUS

CN Glycine, N-[6-[2-[5-(3-ethyl-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene)-1,3-pentadienyl]-1,1-dimethyl-6,8-disulfo-1H-benz[e]indolio]-1-oxohexyl]-L- $\gamma$ -glutamyl-S-[2-[(4-arsenosophenyl)amino]-2-oxoethyl]-L-cysteinyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-B

IT 172777-84-3, Cy 5.5

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; cell membrane impermeable arsenoxide compound for treating arthritis)

RN 172777-84-3 CAPLUS

CN 1H-Benz[e]indolium, 2-[5-[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-ethyl-1,1-dimethyl-6,8-disulfo-, inner salt, trisodium salt (9CI) (CA INDEX NAME)

### 🕽 3 Na

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:904732 CAPLUS

DOCUMENT NUMBER:

136:34316

TITLE: Microarrays for performing proteomic analyses

INVENTOR(S): Charych, Deborah; Beausoleil, Eric; Zuckermann, Ronald

N.

PATENT ASSIGNEE(S): Chiron Corporation, USA

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA	CENT :	NO.			KIN	D	DATE			APPL:						ATE	
		2001								1		001-					0010	
	WO	2001						2003										
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	YU, ZA, ZW							•	•	•	•	•	•	•	·			
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
																	·	
	ΕP	1297															0010	604
		R:	ΑT,	BE,														
								RO,										•
	JP 2003536073							2003	1202	,	JP 20	002-	5024	44		20	0010	604
PRIO	RITY	APP	LN.	Info	.:					1	JS 20	000-2	2097	11P	]	20	0000	605
										1	WO 2	001-	JS180	066	Ţ	v 20	0010	604
PRIO	JР	RW: 1297 R: 2003	CR, HU, SD, YU, GH, DE, BJ, 338 AT, IE, 5360	CU, ID, LV, SE, ZA, GM, DK, CF,	CZ, IL, MA, SG, ZW KE, ES, CG,	DE, IN, MD, SI, LS, FI, CI, A2 DE, LV,	DK, IS, MG, SK, MW, FR, CM, DK, FI,		DZ, KE, MN, TJ, SD, GR, GN, 0402 FR, MK, 1202	EE, KG, MW, TM, SL, IE, GW, CY,	ES, KP, MX, TR, SZ, IT, ML, EP 20 GR, AL, JP 20 US 20	TZ, LU, MR, 001-9 IT, TR	GB, KZ, NO, TZ, UG, MC, NE, 9460 LI,	GD, LC, NZ, UA, ZW, NL, SN, 78 LU,	GE, LK, PL, UG, AT, PT, TD,	GH, LR, PT, US, SE, TG SE, 20	GM, LS, RO, UZ, CH, TR, 00100 MC,	HR, LT, RU, VN, CY, BF, 604 PT,

AB Provided are peptidomimetic protein-binding arrays, their manufacture, use, and application. The protein-binding array elements of the invention include a peptidomimetic segment linked to a solid support via a stable anchor. The invention contemplates peptidomimetic array element library synthesis, distribution, and spotting of array elements onto solid planar substrates, labeling of complex protein mixts., and the anal. of differential protein

binding to the array. The invention also enables the enrichment or purification, and subsequent sequencing or structural anal. of proteins that are identified as differential by the array screen. Kits including proteomic microarrays in accordance with the present invention are also provided.

ΙT **144377-05-9**, Cy 5

> RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (microarrays for performing proteomic analyses)

RN 144377-05-9 CAPLUS

3H-Indolium, 5-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-2-[5-[5-[2-CN [(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-1-(4sulfobutyl)-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-(4sulfobutyl)-, inner salt, sodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

Na

PAGE 1-B

L20 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:228897 CAPLUS

DOCUMENT NUMBER: 134:261272

TITLE: Cell membrane-impermeable arsenoxide compounds, their

preparation, pharmaceutical compositions, and

therapeutic and diagnostic use

INVENTOR(S): Hogg, Philip John; Donoghue, Neil

PATENT ASSIGNEE(S): Unisearch Limited, Australia

SOURCE: PCT Int. Appl., 122 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001021628	A1	20010329	WO 2000-AU1143	20000920
W: AE. AG. AL.	AM. AT	AU. AZ. BA	BB BG BR BY BZ	CA. CH. CN.

CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG CA 2385322 20010329 CA 2000-2385322 AA 20000920 20020807 EP 1228076 A1 EP 2000-965636 20000920 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL JP 2003509516 20030311 JP 2001-525003 T2 20000920 AU 778781 В2 20041223 AU 2000-76320 20000920 ZA 2002002272 Α 20030725 ZA 2002-2272 20020320 PRIORITY APPLN. INFO .: AU 1999-2967 Α 19990920 WO 2000-AU1143 W 20000920

OTHER SOURCE(S): MARPAT 134:261272

AB The invention discloses compds. A(LY)p, (A = ≥1 substantially cell-membrane impermeable pendant group; L = linker and/or spacer; Y = ≥1 arsenoxide or arsenoxide equivalent; p = 1-10; sum total of C atoms in A and L together >6). Preparation of e.g. 4-[N-(S-glutathionylacetyl)amino]phenylarsenoxide is described, as are e.g. the antitumor activity, tumor imaging ability, and activity inhibiting HIV infection of compds. of the invention. Pharmaceutical formulations are also described.

IT 172777-84-3, Cy5.5

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction; substantially cell membrane-impermeable compound and use thereof)

RN 172777-84-3 CAPLUS

CN 1H-Benz[e]indolium, 2-[5-[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-ethyl-1,1-dimethyl-6,8-disulfo-, inner salt, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

### IT 331722-80-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(substantially cell membrane-impermeable compound and use thereof)

RN 331722-80-6 CAPLUS

CN Glycine, N-[6-[2-[5-(3-ethyl-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene)-1,3-pentadienyl]-1,1-dimethyl-6,8-disulfo-1H-benz[e]indolio]-1-oxohexyl]-L-γ-glutamyl-S-[2-[(4-arsenosophenyl)amino]-2-oxoethyl]-L-cysteinyl-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A

PAGE 1-B

IT 172777-84-3D, Cy5.5, arsenoxide derivs.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(substantially cell membrane-impermeable compound and use thereof)

RN 172777-84-3 CAPLUS

CN 1H-Benz[e]indolium, 2-[5-[3-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-1,1-dimethyl-6,8-disulfo-2H-benz[e]indol-2-ylidene]-1,3-pentadienyl]-3-ethyl-1,1-dimethyl-6,8-disulfo-, inner salt, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:696939 CAPLUS

DOCUMENT NUMBER: 129:299898

TITLE: A trans-platinum based compound, a diagnostic kit

comprising said compound and a method for labeling a bio-organic molecule wherein use is made of said

compound

INVENTOR(S): Houthoff, Hendrik Jan; Reedijk, Jan; Jelsma, Tinka;

Heetebrij, Rob J.; Volkers, Herman H.

PATENT ASSIGNEE(S): Kreatech Biotechnology B.V., Neth.

SOURCE: Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA	rent	NO.			KINI	)	DATE			API	LIC	AT:	ION	NO.		I	DATE	
EP	8707	70	<b>-</b>		A1	-	 1998	1014		EP	 199	7-2	 2010	 66	<del>-</del>	-	 19970	 410
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										WO	199	8-1	VL20	6	1	v 1	9980	409

OTHER SOURCE(S): MARPAT 129:299898

AB The present invention is concerned with a trans-platinum based compound for use in a method for labeling a bio-organic mol. The syntheses and applications of several platinum based compds. are presented. The

incorporation of representative compds. into DNA is illustrated.

IT 146368-15-2, Cy 5

RL: RCT (Reactant); RACT (Reactant or reagent)
(trans-platinum based compound, a diagnostic kit and a method for labeling a bio-organic mol.)

RN 146368-15-2 CAPLUS

CN

3H-Indolium, 1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A

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PAGE 2-A

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:682401 CAPLUS

DOCUMENT NUMBER: 129:313127

TITLE: Trans-platinum compound and coordination with

biomolecules including DNA

INVENTOR(S): Houthoff, Hendrik Jan; Reedijk, Jan; Volkers, Herman

H.; Heetebrij, Robert Jochem

PATENT ASSIGNEE(S): Kreatech Biotechnology B.V., Neth.

SOURCE: PCT Int. Appl., 22 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

PAS	rent 1	NO.			KIN		DATE				LICAT				D	ATE	
WO	9845	304			A1										1	9980	409
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US	6248	531			В1		2001	0619	Ţ	JS 1	999-	4027	35		1	9991:	221
	CIORITY APPLN. INFO.:										.997-2						
									7	<b>VO</b> 1	998-1	NL20	6	V	1	9980	109

### OTHER SOURCE(S): MARPAT 129:313127

- AB The present invention is concerned with a trans-platinum based compound for use in labeling bio-organic mols. The invention describes the synthesis and utilization of several trans-platinum compds. One particular example illustrates the application of the trans-platinum compds. in the labeling of DNA.
- IT 146368-15-2
  - RL: RCT (Reactant); RACT (Reactant or reagent)
  - (trans-platinum compound and coordination with biomols. including DNA)
- RN 146368-15-2 CAPLUS
- CN 3H-Indolium, 1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-2-[5-[1-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

PAGE 2-A

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> rod A		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	127.67	294.82
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-13.50	-13.50

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NEWS WWW

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Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an

index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

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COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 26 FEB 2006 HIGHEST RN 875270-69-2 DICTIONARY FILE UPDATES: 26 FEB 2006 HIGHEST RN 875270-69-2

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http://www.cas.org/ONLINE/UG/regprops.html

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#### Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS 27:CLASS 30:CLASS 31:CLASS 32:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS 40:CLASS

#### L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS L1 STR

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SEARCH INITIATED 13:20:32 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 0 TO 0

PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

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FULL SEARCH INITIATED 13:20:41 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 5 TO ITERATE

100.0% PROCESSED 5 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

=> FIL CAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 166.94 167.15

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FILE COVERS 1907 - 27 Feb 2006 VOL 144 ISS 10 FILE LAST UPDATED: 26 Feb 2006 (20060226/ED)

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L4 1 L3

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L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:100690 CAPLUS

DOCUMENT NUMBER: 140:146515

TITLE: Site-specific labeling of proteins using cyanine dye

reporters

INVENTOR(S): Cotton, Graham John

PATENT ASSIGNEE(S): UK

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.A	PATENT NO.					D	DATE		1		ICAT:				D.	ATE	
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WO	2004	0115	56		A1		2004	0205	1	WO 2	003-0	GB31	96		2	0030	728
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											002-			-	_	0020	
											003-			-	_	0030	
															_		

OTHER SOURCE(S): MARPAT 140:146515

AB The invention provides new cyanine dye reagents and methods that afford direct attachment of the cyanine dye reporter to either the N-terminus or C-terminus of a synthetic or recombinant peptide or protein and their derivs., in a site-specific manner, coupled with purification of the resultant

labeled mol. Compds. D-L1-M(F)-L2-B [D is a fluorescent cyanine dye; B is a bioaffinity tag; F is a chemical entity which includes a target bonding group selected from the group consisting of thioester groups and 1,2-aminothiol groups; M is a group adapted for attaching to F; L1, L2 are groups containing 1-40 linked atoms selected from carbon atoms which may optionally include one or more groups selected from NH, alkylimino, O, CH:CH, CONH, or phenylenyl] are claimed. Thus,  $\alpha\text{-D-desthiobiotin-}\epsilon\text{-Cy5-L-lysine-MESNA}$  (Cy5 is a dye and MESNA is HSCH2CH2SO3H) was prepared and used to label N-terminal cysteine Grb2SH2.

IT 653605-43-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(site-specific labeling of proteins using cyanine dye reporters)

RN 653605-43-7 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[6-[[(5S)-5-[[6-[[6-[(4R,5S)-5-methyl-2-oxo-4-imidazolidinyl]-1-oxohexyl]amino]-1-oxohexyl]amino]-6-oxo-6-[(2-sulfoethyl)thio]hexyl]amino]-6-oxohexyl]-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A

PAGE 1-B

$$\begin{array}{c} \text{Me} \\ \text{N} \\ \text{N} \\ \text{O} \\ \text{O} \\ \text{SO}_{3H} \\ \end{array}$$

• IT 653605-43-7DP, conjugate with an N-terminal cysteine derivative of Grb2 protein SH2 domain

RL: SPN (Synthetic preparation); PREP (Preparation)

(site-specific labeling of proteins using cyanine dye reporters)

RN 653605-43-7 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[6-[[(5S)-5-[[6-[[6-[(4R,5S)-5-methyl-2-oxo-4-imidazolidinyl]-1-oxohexyl]amino]-1-oxohexyl]amino]-6-oxo-6-[(2-sulfoethyl)thio]hexyl]amino]-6-oxohexyl]-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A

PAGE 1-B

$$\begin{array}{c}
\text{Me} \\
\text{H} \\
\text{O} \\
\text{O}
\end{array}$$

$$\begin{array}{c}
\text{CH}_2) 5 \\
\text{N} \\
\text{H}
\end{array}$$

$$\begin{array}{c}
\text{CH}_2) 5 \\
\text{N} \\
\text{H}
\end{array}$$

$$\begin{array}{c}
\text{N} \\
\text{R} \\
\text{N} \\
\text{H}
\end{array}$$

=> FIL REGISTRY COST IN U.S. DOLLARS SINCE FILE TOTAL **ENTRY** SESSION FULL ESTIMATED COST 6.49 173.64 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL **ENTRY** SESSION CA SUBSCRIBER PRICE -0.75-0.75

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http://www.cas.org/ONLINE/UG/regprops.html

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Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:CLASS 25:CLASS 26:CLASS 27:CLASS 30:CLASS 31:CLASS 32:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS

#### L5 STRUCTURE UPLOADED

=> d 15 L5 HAS NO ANSWERS L5 STR

Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 13:23:15 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 14 TO ITERATE

100.0% PROCESSED 14 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 56 TO 504

PROJECTED ANSWERS: 1 TO 80

L6 1 SEA SSS SAM L5

=> s 15 sss full

FULL SEARCH INITIATED 13:23:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 199 TO ITERATE

100.0% PROCESSED 199 ITERATIONS 8 ANSWERS SEARCH TIME: 00.00.01

L7 8 SEA SSS FUL L5

=> FIL CAPLUS

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L8 5 L7

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L8 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:121215 CAPLUS

DOCUMENT NUMBER: 142:193939

TITLE: Characterizing polypeptides

INVENTOR(S): Schafer, Jurgen; Hamon, Christian; Schwarz, Josef;

Pearce, Christopher

PATENT ASSIGNEE(S): Xzillion GmbH & Co. KG, Germany; Proteome Sciences PLC

SOURCE: PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
						_											
WO	2005	0129	14		A2		2005	0210	1	WO 2	004-	GB31	39		2	0040	722
WO	2005	0129	14		А3		2005	0630									
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
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		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,

EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

GB 2003-17123 A 20030722 Provided is a method for characterizing an analyte by matrix assisted laser desorption ionization (MALDI) mass spectrometry, which method comprises: (a) labeling the analyte with a light-absorbing label that absorbs light at a pre-determined frequency, to form a labeled analyte; (b) embedding the labeled analyte in a matrix formed from at least one compound that absorbs light, to form an embedded labeled analyte; (c) desorbing the embedded labeled analyte by exposing it to light having the pre-determined frequency, to form a desorbed analyte; and (d) detecting the desorbed analyte by mass spectrometry to characterize the analyte; wherein the light absorbing label comprises a fluorophore moiety, and wherein prior to detecting by mass spectrometry, the analyte is selected for detection on the basis of its fluorophore moiety.

IT 838829-82-6 838829-83-7

> RL: ARU (Analytical role, unclassified); ANST (Analytical study) (characterizing polypeptides)

RN 838829-82-6 CAPLUS

CN 3H-Indolium, 2-[5-[1-[4-[(5S)-5-[[2-cyano-3-(4-hydroxyphenyl)-1-oxo-2-]]]propenyl]amino]-6-[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]-6oxohexyl]amino]-4-oxobutyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-1-propyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

PAGE 1-A

PAGE 1-B

RN 838829-83-7 CAPLUS

CN D-Argininamide, N2-[2-cyano-3-(4-hydroxyphenyl)-1-oxo-2-propenyl]-N6-[4-[2,3-dihydro-3,3-dimethyl-2-[5-(1,3,3-trimethyl-3H-indolium-2-yl)-2,4-pentadienylidene]-1H-indol-1-yl]-1-oxobutyl]-L-lysyl-N-[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-B

L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:100690 CAPLUS

DOCUMENT NUMBER: 140:146515

TITLE: Site-specific labeling of proteins using cyanine dye

reporters

INVENTOR(S): Cotton, Graham John

PATENT ASSIGNEE(S): UK

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                     DATE
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     US 2004023408
                          A1
                                 20040205
                                             US 2002-241333
                                                                     20020911
     CA 2493309
                          AΑ
                                 20040205
                                             CA 2003-2493309
                                                                     20030728
                          A1
     WO 2004011556
                                 20040205
                                             WO 2003-GB3196
                                                                     20030728
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             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
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                                 20040216
                                           AU 2003-246957
     AU 2003246957
                          A1
                                                                     20030728
                                             EP 2003-771163
                                 20050427
     EP 1525266
                          A1
                                                                     20030728
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     JP 2005534739
                          Т2
                                 20051117
                                             JP 2004-523938
                                                                     20030728
                                             US 2005-522675
     US 2005239144
                          A1
                                 20051027
                                                                     20050127
                                             GB 2002-17556
PRIORITY APPLN. INFO.:
                                                                  A 20020730
                                                                  A 20020911
                                             US 2002-241333
                                             WO 2003-GB3196
                                                                  W 20030728
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OTHER SOURCE(S): MARPAT 140:146515

AB The invention provides new cyanine dye reagents and methods that afford direct attachment of the cyanine dye reporter to either the N-terminus or C-terminus of a synthetic or recombinant peptide or protein and their derivs., in a site-specific manner, coupled with purification of the resultant labeled mol. Compds. D-L1-M(F)-L2-B [D is a fluorescent cyanine dye; B is a bioaffinity tag; F is a chemical entity which includes a target bonding group selected from the group consisting of thioester groups and 1,2-aminothiol groups; M is a group adapted for attaching to F; L1, L2 are groups containing 1-40 linked atoms selected from carbon atoms which may optionally include one or more groups selected from NH, alkylimino, O, CH:CH, CONH, or phenylenyl] are claimed. Thus, α-D-desthiobiotin-ε-Cy5-L-lysine-MESNA (Cy5 is a dye and MESNA is HSCH2CH2SO3H) was prepared and used to label N-terminal cysteine Grb2SH2.

IT 312961-84-5P 653605-43-7P 653605-44-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(site-specific labeling of proteins using cyanine dye reporters)

RN 312961-84-5 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[[(5S)-5-carboxy-5-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]pentyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

RN 653605-43-7 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[6-[[(5S)-5-[[6-[[6-[(4R,5S)-5-methyl-2-oxo-4-imidazolidinyl]-1-oxohexyl]amino]-1-oxohexyl]amino]-6-oxo-6-[(2-sulfoethyl)thio]hexyl]amino]-6-oxohexyl]-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A

Et (CH2) 5 N (CH2) 4 S
$$N_{\text{Me}} = N_{\text{Me}} = N_{\text{SO}_{3}\text{H}}$$

PAGE 1-B

RN 653605-44-8 CAPLUS
CN 3H-Indolium, 2-[5-[1-[6-[(5S)-5-carboxy-5-[[6-[[6-[(4R,5S)-5-methyl-2-oxo-4-imidazolidinyl]-1-oxohexyl]amino]-1-oxohexyl]amino]pentyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-A

PAGE 1-B

$$\begin{array}{c} H \\ N \\ O \end{array} (CH_2) 5 \\ N \\ H \end{array} (CH_2) 5 \\ N \\ N \\ H \end{array} O$$

IT 653605-43-7DP, conjugate with an N-terminal cysteine derivative of Grb2 protein SH2 domain

RL: SPN (Synthetic preparation); PREP (Preparation)

(site-specific labeling of proteins using cyanine dye reporters)

RN 653605-43-7 CAPLUS

CN 3H-Indolium, 2-[5-[1,3-dihydro-3,3-dimethyl-1-[6-[[(5S)-5-[[6-[[6-[(4R,5S)-5-methyl-2-oxo-4-imidazolidinyl]-1-oxohexyl]amino]-1-oxohexyl]amino]-6-oxo-6-[(2-sulfoethyl)thio]hexyl]amino]-6-oxohexyl]-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

PAGE 1-B

CAPLUS COPYRIGHT 2006 ACS on STN ANSWER 3 OF 5

ACCESSION NUMBER:

2003:153401 CAPLUS

DOCUMENT NUMBER: TITLE:

138:188074

Synthesis of cyclohexyl- or hetero-cyclohexylnucleosides and their oligomers or conjugates Reuschling, Dieter; Muller-Ibeler, Jochen; Wagner,

INVENTOR(S):

Thomas; Krumm, Thomas; Wermuth, Jochen; Pignot, Marc Nanogen Recognomics GmbH, Germany

PATENT ASSIGNEE(S):

Ger. Offen., 32 pp.

SOURCE:

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	rent 1	NO.			KIN	D :	DATE			APPL	ICAT	ION :	NO.		D.	ATE	
WO	1013 2003 2003	0165	61		A1 A2 A3		 2003 2003 2003	0227		DE 2 WO 2			9730 44		_	0010	813
WO	2003 W:			AT.					BA.	BB.	BG.	BR.	BY,	B7.	CA.	CH.	CN
													FI,				
													KR,	-	-	-	-
													MZ,				
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	ŪG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	BJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG			

EP 1427710 20040616 EP 2002-794784 A2 20020813 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK JP 2005500391 20050106 JP 2003-521868 T2 20020813 US 2004249152 A1 20041209 US 2004-486597 20040719 PRIORITY APPLN. INFO.: DE 2001-10139730 A 20010813 WO 2002-EP9044 W 20020813

OTHER SOURCE(S): MARPAT 138:188074

AB Cyclohexane-based peptide nucleic acid monomer analogs (CNA-monomers, e.g., I) or their enantiomers were prepared Oligomers of CNA monomers were prepared using solid-phase synthesis techniques. A fluorescently labeled CNA pentamer was hybridized with a biotin-labeled pseudo-nucleic acid octamer with a phosphate-bridged backbone composed of 2→4-ribo-pyranose for thermal decomposition study on base-pairing of the two dissimilar nucleic acid analogs. Thus, thymine was condensed with (1R,5R,8R)-8-iodo-2-azabicyclo[3.3.1]nonan-3-one, the intermediate's secondary amine nitrogens were BOC-protected, the lactam bond cleaved, and the thymine-base ring nitrogen BOC group removed to give I. Addnl., preparation and use of H2O3PO(CH2)3CO2H for use as the N-terminal protecting group in CNA-oligomers was given.

IT 497944-56-6P 497944-63-5P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation of cyclohexyl-nucleoside derivs. and their oligomers or conjugates via base coupling to iodoazabicyclononanone followed by ring-opening)

RN 497944-56-6 CAPLUS

CN 3H-Indolium, 2-[(1E,3E,5E)-5-[1-[6-[[(5S)-5-[[((1R,3S,4R)-3-[[((1R,3S,4R)-3-[[((1R,3S,4R)-3-[[((1R,3S,4R)-3-[((1R,3S,4R)-3-(((1R,3S,4R)-3-(((1R,3S,4R)-3-(((1R,3S,4R)-3-((1R,3S,4R)-3

Absolute stereochemistry.

Double bond geometry as shown.

## PAGE 1-B

PAGE 2-B

RN 497944-63-5 CAPLUS

CN  $\beta$ -D-Ribopyranouridine, 4'-O-[(11S)-17-[(3aS, 4S, 6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-hydroxy-11-(hydroxymethyl)-1-oxido-10,13 $dioxo-2-oxa-9,12-diaza-1-phosphaheptadec-1-yl]-5-methyl-\beta-D$ ribopyranouridylyl- $(2'\rightarrow 4')$ - $\beta$ -D-ribopyranoadenylyl- $(2'\rightarrow 4')-\beta-D-ribopyranoguanylyl-(2'\rightarrow 4')-\beta-D$ ribopyranoguanylyl- $(2'\rightarrow 4')$ - $\beta$ -D-ribopyranoadenylyl- $(2'\rightarrow 4')$ - $\beta$ -D-ribopyranocytidylyl- $(2'\rightarrow 4')$ -5-methyl- $\beta$ -D-ribopyranouridylyl- $(2'\rightarrow 4')$ -5-methyl-, complex with 2-[(1E, 3E, 5E)-5-[1-[6-[[(5S)-5-[[[(1R, 3S, 4R)-3-[[[(1R, 3S, 4R)-3-[]](1R, 3S, 4R)-3-[]](1R, 3S, 4R)-3-[]]oxo-1(2H)-pyrimidinyl)cyclohexyl]acetyl]amino]-4-(3,4-dihydro-5-methyl-2,4dioxo-1(2H)-pyrimidinyl)cyclohexyl]acetyl]amino]-4-(2-amino-1,6-dihydro-6oxo-9H-purin-9-yl)cyclohexyl]acetyl]amino]-4-(6-amino-9H-purin-9yl)cyclohexyl]acetyl]amino]-4-(6-amino-9H-purin-9yl)cyclohexyl]acetyl]amino]-5-carboxypentyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3dimethyl-5-sulfo-3H-indolium inner salt (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 497944-62-4 CMF C98 H133 N33 O62 P8 S

Absolute stereochemistry.

# PAGE 1-B

PAGE 2-B

PAGE 3-B

CM 2

CRN 497944-56-6 CMF C105 H135 N29 O19 S2

Absolute stereochemistry. Double bond geometry as shown.

## PAGE -1-B

PAGE 2-B

L8 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:881241 CAPLUS

DOCUMENT NUMBER:

134:43377

TITLE:

pH-sensitive cyanine dyes as reactive fluorescent

reagents

INVENTOR(S):

Mujumdar, Ratnakar; Smith, John Anthony

PATENT ASSIGNEE(S):

Carnegie Mellon University, USA; Amersham Pharmacia

Biotech UK Ltd.

SOURCE:

PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT N	10.			KIN	D	DATE		1	APPL	ICAT	ION	NO.		D.	ATE	
WO 20000				A2 A3		2000 2002		,	WO 2	000-	US15	682		2	0000	608
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CA 23/5/	CA 2375740					2000:	1214	1	CA 2	UUU-:	2375	/40		2	0000	608

EP 1212375 A2 20020612 EP 2000-942696 20000608 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL JP 2003501540 JP 2001-502512 Т2 20030114 20000608 EP 2003-22839 EP 1394219 20040303 Α1 20000608 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY PRIORITY APPLN. INFO.: US 1999-138297P P 19990609 EP 2000-942696 A3 20000608 WO 2000-US15682 W 20000608

OTHER SOURCE(S): MARPAT 134:43377

X CH + CH = CH N  $R^{3}$   $(R^{2}) r$  I

AB The water-soluble cyanine dyes (I; R1, R2 = H, aminomethyl, sulfonate, phosphate, phosphonate, quaternary ammonium, NO2, carboxyalkyl, NCS, alkoxycarbonylaminomethyl; R3 = H, organic group; X, Y = S, O, dialkylmethylene; = 0-3; p, r = 0-4) and their salts and protonated derivs. are fluorescent labels sensitive to acid or base and useful in intracellular environments.

IT 312961-84-5P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; pH-sensitive cyanine dyes for reactive fluorescent biol. labels)

RN 312961-84-5 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[[(5S)-5-carboxy-5-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]pentyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2-ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

ANSWER 5 OF 5 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:572765 CAPLUS

DOCUMENT NUMBER: 133:335456

TITLE: A strategy for highly parallel synthesis of tyrosine-

and histidine-reactive labeling reagents

AUTHOR(S): Lopez-Calle, E.; Fries, J. R.; Riester, D.; Winkler,

D.

CORPORATE SOURCE: EVOTEC BioSystems AG, Hamburg, D-22525, Germany

SOURCE: Chimica Oggi (2000), 18(6), 28-32

CODEN: CHOGDS; ISSN: 0392-839X

PUBLISHER: TeknoScienze

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:335456

GI

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The authors described a method for the fast and effective synthesis of AB tyrosine- and histidine-reactive labeling reagents, some of them being fluorescent. The labeling reagents were derivatized with lysine and p-aminobenzoic acid on solid phase. For example, tetramethylrhodamine derivative I was prepared; the free amino moiety in I was converted to its diazonium form in-situ, and then, reacted with tyrosine to give the labeled tyrosine II. Thus, using this procedure, histidine, atenolol, a peptide (neurotensin) and some proteins (chymotrypsin, streptavidin, alkaline phosphatase, etc.) were similarly labeled.

304449-97-6P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of tyrosine- and histidine-reactive labeling reagents for peptides and proteins)

RN 304449-97-6 CAPLUS

CN 3H-Indolium, 2-[5-[1-[6-[[(5S)-6-amino-5-[(4-aminobenzoyl)amino]-6oxohexyl]amino]-6-oxohexyl]-1,3-dihydro-3,3-dimethyl-5-sulfo-2H-indol-2ylidene]-1,3-pentadienyl]-1-ethyl-3,3-dimethyl-5-sulfo-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

PAGE 1-A

PAGE 1-B

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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	ENTRY	SESSION
FULL ESTIMATED COST	26.01	366.59
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-3.75	-4.50

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